SYSTEM AND METHOD FOR DISTORTING A BIOMETRIC FOR TRANSACTIONS

WITH ENHANCED SECURITY AND PRIVACY

ABSTRACT

Authentication methods are very important in several applications. Existing methods of

5   authentication based on possessions or knowledge have several problems that can be overcome by

using biometrics. Unfortunately biometrics-based authentication is unrevocable today and has

many privacy concerns in users' minds. The proposed technique employs signal scrambling and

morphing techniques to intentionally distort the original biometrics signal in a non-invertible

fashion. If the security is compromised, the system can cancel a particular distortion and reacquire

10 the signal with a new distortion function. This provides functionality as good as non-biometric

authentication methods in terms of their power of revocation.